Mapping climate disadvantage for London's care provision

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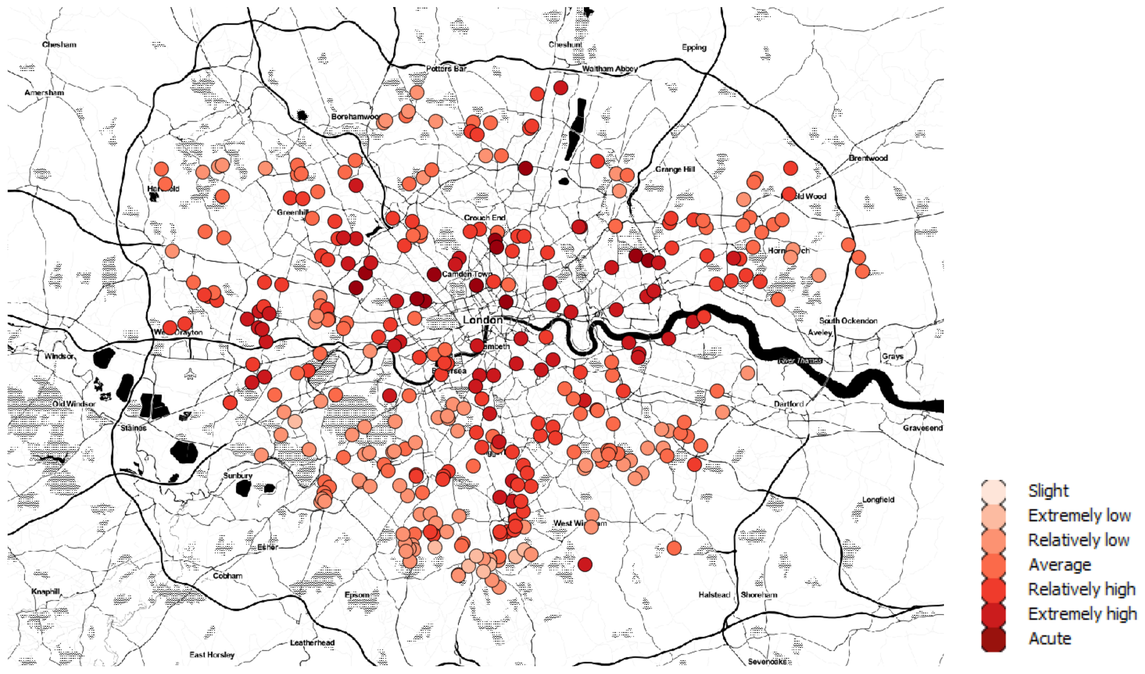
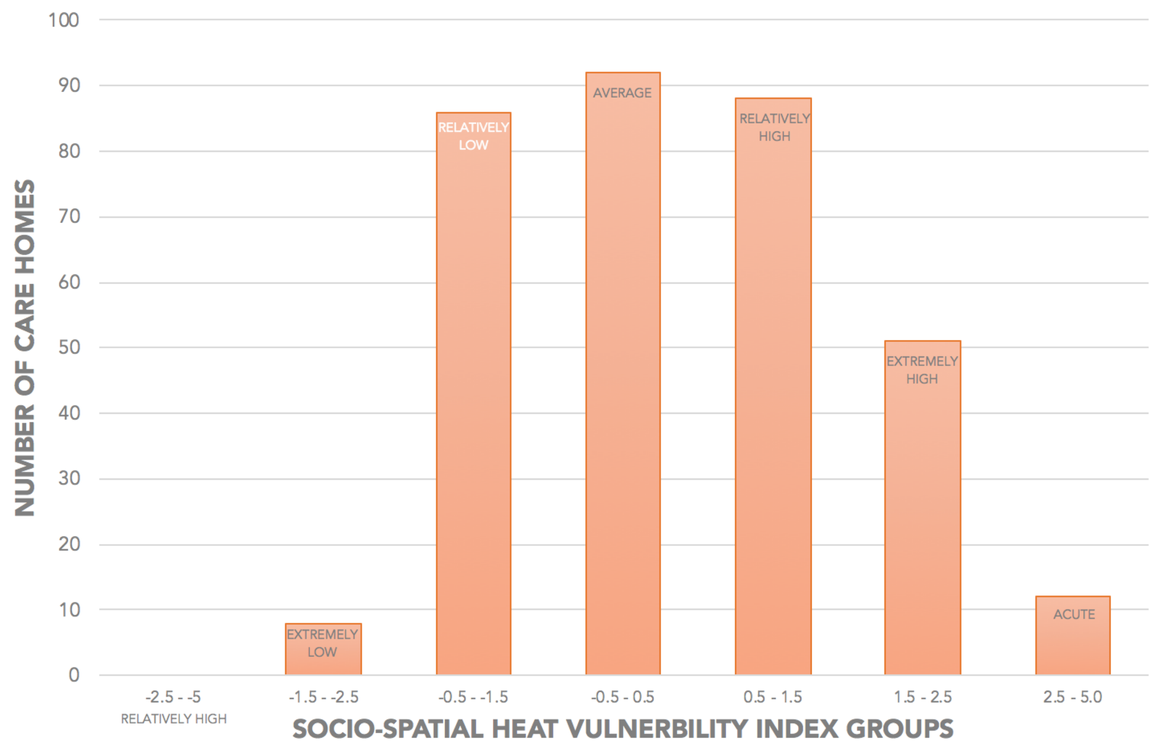


The challenge

Climate change will increase the frequency and magnitude of **extreme heat events** with catastrophic impacts for public health and communities. The most severely affected are elderly, socially isolated individuals, and people suffering from cardiovascular and respiratory diseases, depression or low mobility. **Built environment** factors also modify heat vulnerability appreciably. This study aims to accelerate the development of equitable responses to climate change for **care provision** in cities, with a focus on **Greater London**.



Approach

The location of London care homes and the spatial variability of climate disadvantage in these areas was mapped using the publicly available resources of the **ClimateJust** initiative and **spatial analysis** techniques. A **co-creation multi-stakeholder workshop** held at the Bartlett on 10 May 2018 explored the current evidence base on overheating risk in care settings, identified knowledge gaps and barriers to the implementation of effective heat management and climate change adaptation of the adult social care sector, and ways to overcome them.

Results

Preliminary mapping has indicated that almost **one out of five London care homes** is located in areas of 'extremely high' or 'acute' **socio-spatial vulnerability**, which is defined by the ClimateJust framework as the result of an equally-weighted combination of neighbourhood-level scores for indicators including population sensitivity to heat, exposure, ability to prepare, respond and recover.

Ongoing work & implications

As a next step, the impact of building form and physical properties on the climate resilience of London care homes will be quantified based on the meta-analysis of outputs of existing housing research using **building physics-based models** but specifically focusing, for the first time, on care settings. The study findings will have important implications for building designers, social care providers and managers by helping map the costs associated with overheating risks in care homes and outlining required changes to inspection processes.